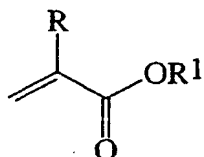


Patent Claims

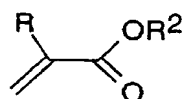
1. A stable polymer dispersion comprising
  - A) at least one dispersed polyolefin,
  - 5 B) at least one dispersing component,
  - C) at least one ester and
  - D) at least one ether comprising (oligo)oxyalkyl groups, the weight ratio of ester C) to ether D) being in the range from 30:1 to 1:30.
- 10 2. Polymer dispersion according to Claim 1, characterized in that the component B) represents a copolymer which comprises one or more blocks A and one or more blocks X, the block A representing
  - 15 olefin copolymer sequences, hydrogenated polyisoprene sequences, hydrogenated copolymers of butadiene/isoprene or hydrogenated copolymers of butadiene/isoprene and styrene, and the block X representing polyacrylate-, polymethacrylate-,  
20 styrene-,  $\alpha$ -methylstyrene or N-vinyl-heterocyclic sequences and/or sequences of mixtures of polyacrylate-, polymethacrylate-, styrene-,  $\alpha$ -methylstyrene or N-vinyl-heterocycles.
- 25 3. Polymer dispersion according to Claim 1 or 2, characterized in that the component B) is obtainable by graft copolymerization of a monomer composition comprising (meth)acrylates and/or styrene compounds onto polyolefins according to  
30 component A).
4. Polymer dispersion according to Claim 3,  
35 characterized in that a monomer composition is used, comprising one or more (meth)acrylates of the formula (I)



(I),

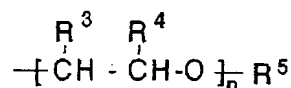
in which R denotes hydrogen or methyl and R<sup>1</sup> denotes hydrogen or a linear or branched alkyl radical having 1 to 40 carbon atoms,

and/or one or more (meth)acrylates of the formula (II)



(II),

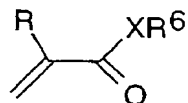
in which R denotes hydrogen or methyl and R<sup>2</sup> denotes an alkyl radical substituted by an OH group having 2 to 20 carbon atoms or denotes an alkoxyated radical of the formula (III)



(III),

in which R<sup>3</sup> and R<sup>4</sup> independently represent hydrogen or methyl, R<sup>5</sup> represents hydrogen or an alkyl radical having 1 to 40 carbon atoms and n represents an integer from 1 to 90,

and/or one or more (meth)acrylates of the formula (IV)



(IV),

in which R denotes hydrogen or methyl, X denotes oxygen or an amino group of the formula -NH- or -Nr<sup>7</sup>-, in which R<sup>7</sup> represents an alkyl radical having 1 to 40 carbon atoms, and R<sup>6</sup> denotes a linear or branched alkyl radical substituted by at

least one  $\text{-NR}^8\text{R}^9$  group and having 2 to 20, preferably 2 to 6, carbon atoms,  $\text{R}^8$  and  $\text{R}^9$ , independently of one another, representing hydrogen, an alkyl radical having from 1 to 20, preferably from 1 to 6 [lacuna] or in which  $\text{R}^8$  and  $\text{R}^9$ , including the nitrogen atom and optionally a further nitrogen or oxygen atom, form a 5- or 6-membered ring which may optionally be substituted by  $\text{C}_1\text{-C}_6\text{-alkyl}$ .

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5. Polymer dispersion according to Claim 2, 3 or 4, characterized in that a monomer composition which comprises dispersing monomers is used in the grafting reaction.

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6. Polymer dispersion according to any of Claims 2 to 5, characterized in that the weight ratio of the blocks A to the blocks X is in the range from 20:1 to 1:20.

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7. Polymer dispersion according to one or more of the preceding claims, characterized in that the component A) comprises one or more olefin copolymers, hydrogenated polyisoprene, hydrogenated copolymers of butadiene/isoprene or hydrogenated copolymers of butadiene/isoprene and styrene.

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8. Polymer dispersion according to one or more of the preceding claims, characterized in that the component D) comprises at least one ethoxylated alcohol.

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9. Polymer dispersion according to Claim 8, characterized in that the ethoxylated alcohol comprises from 2 to 8 ethoxy groups, the hydrophobic radical of the alcohol comprising from 4 to 22 carbon atoms.

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10. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises from 2 to 40% by weight of component C).
- 5 11. Polymer dispersion according to one or more of the preceding claims, characterized in that the weight ratio of component C) to component D) is in the range from 15:1 to 1:15.
- 10 12. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises at least 20% by weight of the component A).
- 15 13. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises from 2 to 40% by weight of the components D).
- 20 14. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises a compound which has a dielectric constant greater than or equal to 9.
- 25 15. Polymer dispersion according to Claim 14, characterized in that the compound having a dielectric constant greater than or equal to 9 is selected from water, ethylene glycol, polyethylene glycol and/or alcohol.
- 30 16. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises up to 30% by weight of component B).
- 35 17. Process for the preparation of polymer dispersions according to any of Claims 1 to 16, characterized in that the component A) is dispersed in a

solution of components B) with application of shear forces at a temperature in the range from 80 to 180°C.

- 5 18. Use of a polymer dispersion according to any of Claims 1 to 16 as an additive for lubricating oil formulations.